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10/706275

FILE 'REGISTRY' ENTERED AT 10:27:22 ON 16 JUN 2005

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 JUN 2005 HIGHEST RN 852355-71-6
DICTIONARY FILE UPDATES: 15 JUN 2005 HIGHEST RN 852355-71-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
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* available and contains the CA role and document type information. *
*
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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

L1 131 S ASREAKKQVEKALE | KQAEDKVKASREAKKQVEKALEQLEDKVK/SQSP

FILE 'CAPLUS' ENTERED AT 10:27:22 ON 16 JUN 2005

FILE COVERS 1907 - 16 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 15 Jun 2005 (20050615/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Searcher : Shears 571-272-2528

L1 131 SEA FILE=REGISTRY ABB=ON PLU=ON ASREAKKQVEKALE|KQAEDKVKAS REAKKQVEKALEQLEDKVK/SQSP
L2 68 SEA FILE=CAPLUS ABB=ON PLU=ON L1
L3 30 SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND (VACCIN? OR IMMUNIS? OR IMMUNIZ?)
L9 24 SEA FILE=CAPLUS ABB=ON PLU=ON L3 AND (GAS(S)STREPTOCOCC? OR STREPTOCOCC?(S)(GROUP A))

L9 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 15 Apr 2005
ACCESSION NUMBER: 2005:324019 CAPLUS
DOCUMENT NUMBER: 142:390944
TITLE: Immunogenic compositions comprising combination of **GAS** antigens derived from **Streptococcus** pyogenes for **immunization**
INVENTOR(S): Grandi, Guido; Telford, John; Bensi, Giuliano
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005032582	A2	20050414	WO 2004-US24868	20040730
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2003-491822P P 20030731
US 2004-541565P P 20040203

AB The invention includes a GAS antigen, GAS 40, which is particularly suitable for use either alone or in combinations with addnl. GAS antigens, such as GAS 117, GAS 130, GAS 277, GAS 236, GAS 40, GAS 389, GAS 504, GAS 509, GAS 366, GAS 159, GAS 217, GAS 309, GAS 372, GAS 039, GAS 042, GAS 058, GAS 290, GAS 511, GAS 533, GAS 527, GAS 294, GAS 253, GAS 529, GAS 045, GAS 095, GAS 193, GAS 137, GAS 084, GAS 384, GAS 202, and GAS 057.

IT **849718-05-4**
RL: PRP (Properties)
(unclaimed protein sequence; immunogenic compns. comprising combination of **GAS** antigens derived from **Streptococcus** pyogenes for **immunization**)

L9 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 09 Jan 2005
ACCESSION NUMBER: 2005:16918 CAPLUS
DOCUMENT NUMBER: 142:112432
TITLE: **Vaccine** composition comprising **group A streptococcal** antigen combined with proteosome adjuvant
INVENTOR(S): Lowell, George H.; White, Gregory L.; Batzloff, Michael Raymond; Burt, David S.; Leanderson, Tomas B.; Good, Michael F.
PATENT ASSIGNEE(S): ID Biomedical Corporation of Quebec, Can.; The Council of the Queensland Institute of Medical Research
SOURCE: U.S. Pat. Appl. Publ., 38 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005002956	A1	20050106	US 2003-706275		20031113
PRIORITY APPLN. INFO.:			EP 2002-2302132	A	20021115
			US 2002-426409P	P	20021115

AB Effective stimulation of immune responses is achieved through the use of a **group A streptococcal** (**GAS**) antigen combined with proteosome adjuvant. The compns. are provided in particular for intranasal administration. The **vaccine** compns. are provided for use in inducing an immune response in an individual for the treatment or prophylaxis of **group A streptococcal** infection (**Streptococcus** pyogenes) in an individual, preferably via prevention or reduction of colonization of the throat following intranasal administration. The disclosed examples describe the evaluation of a peptide (J14), derived from the conserved region of the outer membrane M protein of S. pyogenes, complex with proteosome adjuvant. The J14-proteosome adjuvant-**immunized** mice described herein appear to have increased levels of protection against GAS.

IT **152044-86-5 273206-02-3**
RL: PRP (Properties)
(unclaimed sequence; **vaccine** composition comprising **group A streptococcal** antigen combined with proteosome adjuvant)

L9 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 05 Jan 2005
ACCESSION NUMBER: 2005:5162 CAPLUS
Correction of: 2002:814284
DOCUMENT NUMBER: 142:73410
Correction of: 137:309486
TITLE: Surface proteins and their genes of Streptococcus pyogenes and their use for treatment of infections caused by β-hemolytic streptococci
INVENTOR(S): Olmstead, Stephen Bruce; Zagursky, Robert John; Nickbarg, Elliott Bruce; Winter, Laurie Anne
PATENT ASSIGNEE(S): Wyeth, John and Brother Ltd., USA
SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002083859	A2	20021024	WO 2002-US11610		20020412
WO 2002083859	C1	20040325			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2443493	AA	20021024	CA 2002-2443493		20020412
EP 1421098	A2	20040526	EP 2002-762074		20020412
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
BR 2002008874	A	20040622	BR 2002-8874		20020412
JP 2004533236	T2	20041104	JP 2002-582198		20020412
US 2004236072	A1	20041125	US 2004-474792		20040505
PRIORITY APPLN. INFO.:			US 2001-283358P	P	20010413
			WO 2002-US11610	W	20020412

AB The present invention provides 334 nucleic acid and encoded protein compns. and methods to ameliorate and prevent infections caused by all β-hemolytic **streptococci**, including **groups A**, B, C, and G. To identify polynucleotides and polypeptides useful for the amelioration and prevention of infections caused by β-hemolytic streptococci, two strategies, a genomic approach and a proteomic approach, were used to identify surface-localized Streptococcus pyogenes proteins. The genomic approach included an extensive genomic anal. in silico of the S. pyogenes genome using several algorithms design to identify and characterize genes that would encode surface-localized proteins. Some of the proteins are also characterized for opsonphagocytic activity. The polynucleotides, polypeptides, and antibodies of the invention can be formulated for use as immunogenic compns. Also disclosed are methods for **immunizing** against and reducing β-hemolytic streptococcal infection, and for detecting β-hemolytic streptococci in a biol. sample.

IT **812029-82-6**
RL: PRP (Properties)
(unclaimed protein sequence; surface proteins and their genes of Streptococcus pyogenes and their use for treatment of infections caused by β-hemolytic streptococci)

L9 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 24 Nov 2004
ACCESSION NUMBER: 2004:1011168 CAPLUS
DOCUMENT NUMBER: 142:216860
TITLE: Development of lipid-core-peptide (LCP) based

vaccines for the prevention of **group A streptococcal** (**GAS**) infection

AUTHOR(S): Moyle, Peter M.; Horvath, Aniko; Olive, Colleen; Good, Michael F.; Toth, Istvan

CORPORATE SOURCE: School of Molecular and Microbial Sciences, School of Pharmacy, The University of Queensland, Brisbane, Queensland, Australia

SOURCE: Letters in Peptide Science (2004), Volume Date 2003, 10(5-6), 605-613
CODEN: LPSCEM; ISSN: 0929-5666

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Traditional **vaccines** consisting of whole attenuated micro-organisms, or microbial components administered with adjuvant, have been demonstrated as one of the most cost-effective and successful public health interventions. Their use in large scale **immunization** programs has lead to the eradication of smallpox, reduced morbidity and mortality from many once common diseases, and reduced strain on health services. However, problems associated with these **vaccines** including risk of infection, adverse effects, and the requirement for refrigerated transport and storage have led to the investigation of alternative **vaccine** technologies. Peptide **vaccines**, consisting of either whole proteins or individual peptide epitopes, have attracted much interest, as they may be synthesized to high purity and induce highly specific immune responses. However, problems including difficulties stimulating long lasting immunity, and population MHC diversity necessitating multiepitopic **vaccines** and/or HLA tissue typing of patients complicate their development. Furthermore, toxic adjuvants are necessary to render them immunogenic, and as such non-toxic human-compatible adjuvants need to be developed. Lipidation has been demonstrated as a human compatible adjuvant for peptide **vaccines**. The lipid-core-peptide (LCP) system, incorporating lipid adjuvant, carrier, and peptide epitopes, exhibits promise as a lipid-based peptide **vaccine** adjuvant. The studies reviewed herein investigate the use of the LCP system for developing **vaccines** to protect against **group A streptococcal** (**GAS**) infection. The studies demonstrate that LCP-based GAS **vaccines** are capable of inducing high-titers of antigen specific IgG antibodies. Furthermore, mice **immunized** with an LCP-based GAS **vaccine** were protected against challenge with 8830 strain GAS.

IT **843609-86-9 843609-87-0 843609-88-1 843609-89-2 843609-90-5 843609-91-6 843609-92-7**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(development of lipid-core-peptide based **vaccines** for prevention of **group A streptococcal** infection)

IT **152044-86-5**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(development of lipid-core-peptide based **vaccines** for prevention of **group A streptococcal** infection)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L9 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 16 Sep 2004
ACCESSION NUMBER: 2004:756822 CAPLUS
DOCUMENT NUMBER: 141:276270
TITLE: Streptococcus pyogenes-derived hyperimmune serum reactive antigens for **vaccines**, drug screening, diagnosis and treatment of bacterial infection
INVENTOR(S): Meinke, Andreas; Nagy, Eszter; Winkler, Birgit; Gelbmann, Dieter
PATENT ASSIGNEE(S): Intercell A.-G., Austria
SOURCE: PCT Int. Appl., 145 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078907	A2	20040916	WO 2004-EP2087	20040302
WO 2004078907	A3	20050310		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2003-450061 A 20030304

AB The present invention discloses isolated nucleic acid mols. encoding a hyperimmune serum reactive antigen or a fragment thereof as well as hyperimmune serum reactive antigens or fragments thereof from S. pyogenes, methods for isolating such antigens and specific uses therefor. These hyperimmune serum reactive antigens are useful for producing antibodies, and as **vaccines**, diagnostic and therapeutic agents for bacterial infection especially S. pyogenes infection in pharyngitis, wound infection, and bacteremia.

IT **756906-73-7P**
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; Streptococcus pyogenes-derived hyperimmune serum reactive antigens for **vaccines**, drug screening, diagnosis and treatment of bacterial infection)

L9 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 09 Aug 2004

ACCESSION NUMBER: 2004:639434 CAPLUS
DOCUMENT NUMBER: 141:348335
TITLE: Preclinical evaluation of a **vaccine** based on conserved region of M protein that prevents **group A streptococcal** infection
AUTHOR(S): Batzloff, Michael; Yan, Huaru; Davies, Mark; Hartas, Jon; Good, Michael
CORPORATE SOURCE: Cooperative Research Centre for Vaccine Technology, The Queensland Institute of Medical Research, Post Office Royal Brisbane Hospital, QLD, 4029, Australia
SOURCE: Indian Journal of Medical Research (2004), 119(Suppl.), 104-107
CODEN: IMIREV; ISSN: 0971-5916
PUBLISHER: Indian Council of Medical Research
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Infection with **group A Streptococcus** (**GAS**) may result in a number of human diseases ranging from the relatively benign pharyngitis to the potentially life-threatening invasive diseases and post-infectious sequelae. We have previously defined a minimal B-cell epitope from the conserved region of the M-protein. Here we report on the immunogenicity, opsonic potential of the resulting sera and the level of protection induced by this peptide in comparison to a pepsin extract of the M protein. Inbred mice were **immunized** with peptides derived from the M protein. Sera were collected from the **immunized** mice and its opsonic potential determined for M1 and M6 GAS strains. Mice were then intranasally challenged with a virulent M1 GAS strain to determine the protective efficacy of the peptides. The peptides induced significant antibody responses when delivered s.c. and **immunized** mice demonstrated significantly enhanced survival compared to control groups following challenge. The data obtained in the present study indicated that the chimeric peptide J8 from the conserved region of the M protein could form the basis for an anti-streptococcal **vaccine** in future.

IT **775348-82-8**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibody response induced by peptides derived from M protein for anti-streptococcal **vaccines**)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 22 Feb 2004
ACCESSION NUMBER: 2004:143191 CAPLUS
DOCUMENT NUMBER: 140:198068
TITLE: Novel immunogenic lipopeptides comprising T-helper and B-cell epitopes for **vaccination** against infection, fertility, gastric ulcer and tumor
INVENTOR(S): Jackson, David; Zeng, Weiguang
PATENT ASSIGNEE(S): The Council of the Queensland Institute of Medical Research, Australia
SOURCE: PCT Int. Appl., 195 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004014956	A1	20040219	WO 2003-AU1018		20030812
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2494192	AA	20040219	CA 2003-2494192		20030812
PRIORITY APPLN. INFO.:			US 2002-402838P	P	20020812
			WO 2003-AU1018	W	20030812

OTHER SOURCE(S): MARPAT 140:198068

AB The present invention provides synthetic immunogenic lipopeptide mols. comprising co-linear T-helper and B cell epitopes, and methods for their production and use in the generation of primary and secondary immune responses, and for the **vaccination** of animal subjects against particular antigens. More particularly, the present invention provides highly soluble lipopeptides wherein the lipid moiety is attached to the terminal side-chain group of an internal lysine or lysine analog, preferably to the terminal side-chain group of an internal diamino acid residue. Preferably the internal lysine or lysine analog is positioned between the T-helper epitope and the B cell epitope or within the T-helper epitope. Lipopeptide antigen of influenza virus hemagglutinin, canine distemper virus F protein, viral glycoprotein, **Group A Streptococcus** M protein, gastrin, pentagastrin, and LHRH are depicted as anti-infective, anti-ulcerative and contraceptive **vaccines**.

IT **661475-93-0P 661475-94-1P**
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(immunogenic lipopeptides comprising T-helper epitope and B-cell epitope for **vaccination** against infection, fertility, gastric ulcer and tumor)

IT **273206-02-3D**, lipopeptide conjugates **663226-65-1D**, lipopeptide conjugates **663226-66-2D**, lipopeptide conjugates **663226-67-3D**, lipopeptide conjugates **663226-68-4D**, lipopeptide conjugates
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunogenic lipopeptides comprising T-helper epitope and B-cell epitope for **vaccination** against infection, fertility, gastric ulcer and tumor)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L9 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 14 Jan 2004
ACCESSION NUMBER: 2004:28603 CAPLUS
DOCUMENT NUMBER: 141:37331
TITLE: Lipid-core-peptides for **vaccination**; structure-activity relationship
AUTHOR(S): Toth, Istvan; Horvath, Aniko; McGeary, Ross P.; Hayman, Wendy A.; Olive, Colleen; Good, Michael F.
CORPORATE SOURCE: School of Pharmacy, The University of Queensland, Brisbane, QLD, 4072, Australia
SOURCE: Peptides 2002, Proceedings of the European Peptide Symposium, 27th, Sorrento, Italy, Aug. 31-Sept. 6, 2002 (2002), 634-635. Editor(s): Benedetti, Ettore; Pedone, Carlo. Edizioni Ziino: Castellammare di Stabia, Italy.
CODEN: 69EYXG; ISBN: 88-900948-1-8
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A series of lipid-polylysine core-peptide (LCP) compds., containing a **group A streptococcal** peptide epitope from the bacterial surface M protein were synthesized. The number of peptide sequences, the number, length and spacing of lipids were varied. The most immunogenic construct contained the longest alkyl side chains. The number of lipoamino acids in the constructs affected the immunogenicity and spacing between the alkyl side chains increased immunogenicity. An increase of up to 100-fold was observed in the immunogenicity of the LP-p145 administered without conventional adjuvant compared with p145 administered with CFA. The nature of the LCP construct also had an influence on the opsonic activity of antisera. The LCP system has the potential to enhance immunogenicity of complex peptides and being a serious tool in **vaccine** design.
IT **152044-86-5 448895-56-5 448895-57-6 448895-58-7**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**group A streptococcal** lipid-polylysine-core peptides for **vaccines**)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 30 May 2002
ACCESSION NUMBER: 2002:404890 CAPLUS
DOCUMENT NUMBER: 137:323858
TITLE: Protection of mice from **group A streptococcal** infection by intranasal **immunisation** with a peptide **vaccine** that contains a conserved M protein B cell epitope and lacks a T cell autoepitope
AUTHOR(S): Olive, Colleen; Clair, Timothy; Yarwood, Penny; Good, Michael F.
CORPORATE SOURCE: Cooperative Research Centre for Vaccine Technology, The Queensland Institute of Medical Research, Brisbane, 4029, Australia

SOURCE: Vaccine (2002), 20(21-22), 2816-2825
CODEN: VACCDE; ISSN: 0264-410X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Infection with **group A streptococci** (**GAS**) can lead to rheumatic fever (RF) and rheumatic heart disease (RHD) which are a major health concern particularly in indigenous populations worldwide, and especially in Australian Aboriginals. A primary route of GAS infection is via the upper respiratory tract, and therefore, a major goal of research is the development of a mucosal-based GAS **vaccine**. The majority of the research to date has focused on the GAS M protein since immunity to GAS is mediated by M protein type-specific opsonic antibodies. There are two major impediments to the development of a **vaccine**-the variability in M proteins and the potential for the induction of an autoimmune response. To develop a safe and broad-based **vaccine**, the authors have therefore focused on the GAS M protein conserved C-region, and have identified peptides, J8 and the closely related J8 peptide (J14), which may be important in protective immunity to GAS infection. Using a mucosal animal model system, the data have shown a high degree of throat GAS colonization in B10.BR mice 24 h following intranasal **immunization** with the mucosal adjuvant, cholera toxin B subunit (CTB), and/or diphtheria toxoid (dT) carrier, or PBS alone, and challenge with the M1 GAS strain. However, GAS colonization of the throat was significantly reduced following intranasal **immunization** of mice with the **vaccine** candidate J8 conjugated to dT or J14-dT when administered with CTB. Moreover, J8-dT/CTB and J14-dT/CTB-**immunized** mice had a significantly higher survival when compared to CTB and PBS-**immunized** control mice. These data indicate that immunity to GAS infection can be evoked by intranasal **immunization** with a GAS M protein C-region peptide **vaccine** that contains a protective B cell epitope and lacks a T cell autoepitope.

IT **473836-05-4D**, diphtheria toxoid conjugates
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(protective antibody response against **group A streptococci** is induced by)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 14 May 2002

ACCESSION NUMBER: 2002:359275 CAPLUS
DOCUMENT NUMBER: 137:74443

TITLE: Nucleic acids and proteins from group B Streptococcus agalactiae and group A Streptococcus pyogenes

INVENTOR(S): Telford, John; Masignani, Vega; Margarit Y Ros, Immaculada; Grandi, Guido; Fraser, Claire; Tettelin, Herve
PATENT ASSIGNEE(S): Chiron S.P.A., Italy; The Institute for Genomic Research

SOURCE: PCT Int. Appl., 4525 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034771	A2	20020502	WO 2001-XB4789	20011029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2002034771	A2	20020502	WO 2001-GB4789	20011029
WO 2002034771	A3	20030116		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
ZA 2003002739	A	20041117	ZA 2003-2739	20030408
PRIORITY APPLN. INFO.:			GB 2000-26333 A	20001027
			GB 2000-28727 A	20001124
			GB 2001-5640 A	20010307
			WO 2001-GB4789 W	20011029

AB The invention provides proteins from group B streptococcus (Streptococcus agalactiae) and group A streptococcus (Streptococcus pyogenes), including amino acid sequences and the corresponding nucleotide sequences. The nucleotide sequence of the full genome of S. agalactiae strain 2603 V/R is provided as are 5483 protein-coding genes and the amino acid sequences of their protein products. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compns., and/or diagnostics. The proteins are also targets for antibiotics to treat or prevent bacterial infection, and in particular, streptococcal infection. [This abstract record is one of three records for this document necessitated by the large number of index entries required to fully index the document and publication constraints.].

L9 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 23 Apr 2002
ACCESSION NUMBER: 2002:305365 CAPLUS
DOCUMENT NUMBER: 137:167876
TITLE: Enhancing the immunogenicity and modulating the fine epitope recognition of antisera to a helical

group A streptococcal peptide **vaccine** candidate from the M protein using lipid-core peptide technology

AUTHOR(S): Hayman, Wendy A.; Toth, Istvan; Flinn, Nicholas; Scanlon, Martin; Good, Michael F.

CORPORATE SOURCE: The Cooperative Research Centre for Vaccine Technology and The Australian, The Queensland Institute of Medical Research, Brisbane, Australia

SOURCE: Immunology and Cell Biology (2002), 80(2), 178-187
CODEN: ICBIEZ; ISSN: 0818-9641

PUBLISHER: Blackwell Science Asia Pty Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A conserved helical peptide **vaccine** candidate from the M protein of **group A streptococci**, p145, has been described. Minimal epitopes within p145 have been defined and an epitope recognized by protective antibodies, but not by autoreactive T cells, has been identified. When administered to mice, p145 has low immunogenicity. Many boosts of peptide are required to achieve a high antibody titer (> 12 800). To attempt to overcome this low immunogenicity, lipid-core peptide technol. was employed. Lipid-core peptides (LCP) consist of an oligomeric polylysine core, with multiple copies of the peptide of choice, conjugated to a series of lipoamino acids, which acts as an anchor for the antigen. Seven different LCP constructs based on the p145 peptide sequence were synthesized (LCP1→LCP7) and the immunogenicity of the compds. examined The most immunogenic constructs contained the longest alkyl side-chains. The number of lipoamino acids in the constructs affected the immunogenicity and spacing between the alkyl side-chains increased immunogenicity. An increase in immunogenicity (ELISA titers) of up to 100-fold was demonstrated using this technol. and some constructs without adjuvant were more immunogenic than p145 administered with complete Freund's adjuvant (CFA). The fine specificity of the induced antibody response differed for the different constructs but one construct, LCP4, induced antibodies of identical fine specificity to those found in endemic human serum. Opsonic activity of LCP4 antisera was more than double that of p145 antisera. These data show the potential for LCP technol. to both enhance immunogenicity of complex peptides and to focus the immune response towards or away from critical epitopes.

IT **448895-51-0P 448895-52-1P 448895-55-4P 448895-56-5P 448895-57-6P 448895-58-7P 448895-59-8P**
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(enhancing the immunogenicity and modulating the fine epitope recognition of antisera to a helical **group A streptococcal** peptide **vaccine** candidate from the M protein using lipid-core peptide technol.)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 23 Oct 2001
ACCESSION NUMBER: 2001:768691 CAPLUS
DOCUMENT NUMBER: 136:66841
TITLE: Association of a provisional new emm type opacity factor-negative **group A**

Streptococci strain ST4529 with septicemia
AUTHOR(S): Rantty, R. R.; Eshaghi, M.; Ali, A. M.; Jamal, F.; Yusoff, K.
CORPORATE SOURCE: Department of Biochemistry and Microbiology, Universiti Putra Malaysia, Serdang, 43400, Malay.
SOURCE: Journal of Microbiology (Seoul, Republic of Korea) (2001), 39(3), 236-239
CODEN: JOMIFG; ISSN: 1225-8873
PUBLISHER: Microbiological Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Group A Streptococcus** strain ST4529 is a provisional new emm type which has been recently reported in Malaysia. This strain was found to be opacity factor (OF) neg. with a T1 phenotype. Usually, OF neg. strains with T1 phenotypes are associated with acute rheumatic fever. However, strain ST4529 was isolated from the blood of a patient with septicemia. Comparison of the deduced amino acid sequence of the mature hypervariable N-terminus of ST4529 showed only 43% identity with that of M5, the closest matched OF neg. strain with a T1 phenotype. Thus, ST4529 most probably encodes a new serospecifically unique M protein which is associated with septicemia rather than pharyngitis infections. The strains with these phenotypes are very important because their sequences should be considered for developing any anti-streptococcal **vaccines**.

IT **384392-93-2**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; association of provisional new emm type opacity factor-neg. group Streptococci strain ST4529 with septicemia)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 16 May 2000
ACCESSION NUMBER: 2000:316649 CAPLUS
DOCUMENT NUMBER: 132:333387
TITLE: Recombinant multivalent M protein **vaccine** against Streptococcus
INVENTOR(S): Dale, James B.; Lederer, James W.
PATENT ASSIGNEE(S): University of Tennessee Research Corporation, USA
SOURCE: U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 945,954, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6063386	A	20000516	US 1997-937271	19970915
ES 2170075	T3	20020801	ES 1993-922201	19930915
PRIORITY APPLN. INFO.:			US 1992-945954 B2	19920916

AB The authors disclose the preparation of chimeric matrix proteins derived from multiple serotypes of **group A streptococci**. The chimeric proteins are immunogenic and provoke opsonic antibodies in rabbits.

IT **156067-07-1 267640-94-8**
RL: PRP (Properties)
(unclaimed protein sequence; recombinant multivalent M protein **vaccine** against Streptococcus)
REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 19 Apr 2000
ACCESSION NUMBER: 2000:248273 CAPLUS
DOCUMENT NUMBER: 133:16085
TITLE: New multi-determinant strategy for a **group A streptococcal vaccine** designed for the Australian Aboriginal population
AUTHOR(S): Brandt, Evelyn R.; Sriprakash, K. S.; Hobb, Rhonda I.; Hayman, Wendy A.; Zeng, Weiguang; Batzloff, Michael R.; Jackson, David C.; Good, Michael F.
CORPORATE SOURCE: Cooperative Research Centre for Vaccine Techllology, The Queensland Institute of Medical Research, and The Australian Centre for International and Tropical Health and Nutrition, The University of Queensland, Brisbane, 4029, Australia
SOURCE: Nature Medicine (New York) (2000), 6(4), 455-459
CODEN: NAMEFI; ISSN: 1078-8956
PUBLISHER: Nature America
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Infection with **group A streptococci** can result in acute and post-infectious pathol., including rheumatic fever and rheumatic heart disease. These diseases are associated with poverty and are increasing in incidence, particularly in developing countries and amongst indigenous populations, such as Australia's Aboriginal population, who suffer the highest incidence worldwide. Immunity to **group A streptococci** is mediated by antibodies against the M protein, a coiled-coil alpha helical surface protein of the bacterium. **Vaccine** development faces two substantial obstacles. Although opsonic antibodies directed against the N terminus of the protein are mostly responsible for serotypic immunity, more than 100 serotypes exist. Furthermore, whereas the pathogenesis of rheumatic fever is not well understood, increasing evidence indicates an autoimmune process. To develop a suitable **vaccine** candidate, we first identified a min., helical, non-host-cross-reactive peptide from the conserved C-terminal half of the protein and displayed this within a non-M-protein peptide sequence designed to maintain helical folding and antigenicity, J14. As this region of the M protein is identical in only 70% of **group A streptococci** isolates, the optimal candidate might consist of the conserved determinant with common N-terminal sequences found in communities with endemic **group A streptococci**. We linked seven serotypic peptides with J14 using a new chemical technique that enables the immunogen to display all the individual peptides pendant from an alkane backbone. This construct demonstrated excellent immunogenicity and protection in mice.
IT **273206-02-3**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(new multi-determinant strategy for a **group A streptococcal vaccine** that induces opsonizing antibodies)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 10 May 1999
ACCESSION NUMBER: 1999:283732 CAPLUS
DOCUMENT NUMBER: 131:57532
TITLE: Functional analysis of IgA antibodies specific for a conserved epitope within the M protein of **group A streptococci** from Australian aboriginal endemic communities
AUTHOR(S): Brandt, Evelyn R.; Hayman, Wendy A.; Currie, Bart; Carapetis, Jonathan; Jackson, David C.; Do, Kim-Anh; Good, Michael F.
CORPORATE SOURCE: Molecular Immunology Laboratory and CRC for Vaccine Technology, Queensland Institute of Medical Research, Brisbane, 4029, Australia
SOURCE: International Immunology (1999), 11(4), 569-576
CODEN: INIMEN; ISSN: 0953-8178
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mucosa is one of the initial sites of **group A streptococcal** (**GAS**) infection and salivary IgA (sIgA) is thought to be critical to immunity. The authors studied the acquisition and the function of sIgA specific for a conserved region epitope, p145 (sequence: LRRDLDASREAKKQVEKALE) of the M protein. Peptide 145-specific sIgA is highly prevalent within an Aboriginal population living in an area endemic for GAS and acquisition of p145-specific sIgA increases with age, consistent with a role for such antibodies in immunity to GAS. Human sIgA and IgG specific for p145 were affinity purified and shown to opsonize M5 GAS in vitro. Opsonization could be specifically inhibited by the addition of free p145 to the antibodies during assay. Opsonization of GAS was totally dependent on the presence of both complement and polymorphonuclear leukocytes, and, moreover, affinity-purified p145-specific sIgA was shown to fix complement in the presence of M5 GAS. Thus, mucosal IgA to this conserved region peptide within the M protein has an important role in human immunity against **GAS** and may be useful in a broad-based cross-protective anti-**streptococcal vaccine**.
IT **152044-86-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(of M protein; IgG and salivary IgA to conserved epitope in M protein of **group A streptococci** from Australian aborigines)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 07 Jan 1998
ACCESSION NUMBER: 1998:3720 CAPLUS
DOCUMENT NUMBER: 128:87562

TITLE: Intranasal **immunization** of mice with a streptococcal peptide-based **vaccine**
AUTHOR(S): Relf, Wendy; Hayman, Wendy; Russell-Jones, Gregory; Good, Michael
CORPORATE SOURCE: Royal Brisbane Hosp., Queensland Inst. Medical Res., Brisbane, 4029, Australia
SOURCE: Advances in Experimental Medicine and Biology (1997), 418(Streptococci and the Host), 859-861
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The comparative role of systemic and local responses in immune protection after **group A streptococcal** infection are not fully understood. Recent data suggest that mucosal protective responses may be directed to non-type specific regions of the M protein. In this study, the authors examined the salivary and serum immune responses following intranasal **immunization** with p145 and p160 peptide epitopes of the type M5 streptococci.

IT **152044-86-5D**, tetanus toxoid conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(mucosal immune response to intranasal **immunization** with streptococcal peptide-based **vaccine**)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 10 Dec 1997
ACCESSION NUMBER: 1997:766111 CAPLUS
DOCUMENT NUMBER: 128:74035
TITLE: Mapping the minimal murine T cell and B cell epitopes within a peptide **vaccine** candidate from the conserved region of the M protein of **group A streptococcus**
AUTHOR(S): hayman, Wendy A.; Brandt, Evelyn R.; Relf, Wendy A.; Cooper, Juan; Saul, Allan; Good, Michael F.
CORPORATE SOURCE: Cooperative Res. Cent. Vaccine Technol., Queensland Inst. Med. Res., Queensland, 4029, Australia
SOURCE: International Immunology (1997), 9(11), 1723-1733
CODEN: INIMEN; ISSN: 0953-8178
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The highly conserved C-terminus of the M protein of **group A streptococcus** (**GAS**) is a promising **vaccine** candidate. An epitope within the conserved C-terminus of the M protein, peptide 145 (a 20-mer with the sequence: LRRDLDASREAKKQVEKALE), has been defined which is the target of opsonic antibodies in both humans and mice, and is recognized by the sera of most adults living in areas of high streptococcal exposure. However, due to potential cross-reactivity between T cells stimulated by this region of the M protein and host cardiac myosin, it is critical to define precisely the minimal protective epitopes within p145. Studies have shown that the immunodominant epitope expressed by p145 is conformational, occurring as an α-helical coiled-soil. To

enable the mapping of the murine minimal B cell and T cell epitopes within p145, the authors used a novel strategy that allowed them to present shorter sequences of p145 in a native-like conformation. The minimal B cell epitope was contained within residues 7-20 of the p145 sequence, and the authors have shown that mice **immunized** with this region are able to generate antibodies that bind to and also opsonize the organism GAS. The T cell epitope is located at the N-terminal region of the p145 sequence, residues 3-14. The authors thus managed to define a **vaccine** candidate, a minimal opsonic B cell epitope within the p145 sequence, that does not incorporate a potentially deleterious T cell epitope.

IT **152044-86-5 200557-59-1**
RL: PRP (Properties)
(mapping minimal murine T cell and B cell epitopes within peptide from conserved region of M protein of **group A Streptococcus** in relation to rheumatic disease **vaccine**)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 08 Dec 1997
ACCESSION NUMBER: 1997:764747 CAPLUS
DOCUMENT NUMBER: 128:21635
TITLE: Human antibodies to the conserved region of the M protein: opsonization of heterologous strains of **group A streptococci**
AUTHOR(S): Brandt, Evelyn R.; Hayman, Wendy A.; Currie, Bart; Pruksakorn, Sumalee; Good, Michael F.
CORPORATE SOURCE: Molecular Immunology Laboratory and the Cooperative Research Centre for Vaccine Technology, Queensland Institute of Medical Research, Royal Brisbane Hospital, Qld. 4029, Australia
SOURCE: Vaccine (1997), 15(16), 1805-1812
CODEN: VACCDE; ISSN: 0264-410X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A 20-mer peptide (p145) in the carboxyl-terminal region of the M protein of **group A streptococci** (**GAS**) has previously been defined as the target of bactericidal antibodies. Sequence anal. of seven field isolates from indigenous Australians living in an area highly endemic for GAS and five laboratory reference strains (encompassing nine unique serotypes plus three nontypeables) demonstrates that this region is highly conserved (sequence identity ranging from 65 to 95%) with six of the 12 sequences being identical to p145. Most of the sequence dissimilarity is contained within the last seven amino acids of p145. Competitive ELISA demonstrates that human antibodies specific for p145 cannot discriminate between p145 and synthetic peptides representing four from four of the variant sequences tested. Ig purified from endemic sera was able to opsonize each of the GAS isolates and free p145 as well as a peptide expressing a minimal conformational epitope within p145 (requiring amino acids between positions 2 and 13 of p145), but not an irrelevant peptide, were able to partially or completely inhibit opsonization of all isolates and reference strains. Thus adult endemic sera contain antibodies which are bactericidal for multiple

GAS serotypes and which are specific for a sequence of 12 amino acids contained within the p145 region of the M protein.

IT **152044-86-5P**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(epitope; human antibodies to conserved region of M protein and opsonization of heterologous strains of **group A streptococci** in relation to strain-specific sequences)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 29 Nov 1996
ACCESSION NUMBER: 1996:708701 CAPLUS
DOCUMENT NUMBER: 126:6293
TITLE: Opsonic human antibodies from an endemic population specific for a conserved epitope on the M protein of **group A streptococci**
AUTHOR(S): Brandt, E. R.; Hayman, W. A.; Currie, B.; Carapetis, J.; Wood, Y.; Jackson, D. C.; Cooper, J.; Melrose, W. D.; Saul, A. J.; Good, M. F.
CORPORATE SOURCE: Molecular Immunology Laboratory, Queensland Institute of Medical Research, Brisbane, 4029, Australia
SOURCE: Immunology (1996), 89(3), 331-337
CODEN: IMMUAM; ISSN: 0019-2805
PUBLISHER: Blackwell
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This study demonstrates the presence of epitope-specific opsonic human antibodies in a population living in an area endemic for **group A streptococci** (**GAS**) infection. Antibodies recognizing a conserved C-terminal region epitope (p145, sequence in single letter amino acids; LRRDLDASREAKKOVEKALE) of the M protein of GAs were isolated from human patients by affinity chromatog. and were shown to be of the IgG1 and IgG3 subclasses. These antibodies could reduce the number of colonies of serotype 5 GAS in an in vitro opsonization assay by 71-92%, compared with an equal amount of IgG from control adult donors living in non-endemic areas and without antibodies to p145. Addition of the peptide, p145, completely inhibited this opsonization. Indirect immunofluorescence showed that p145-specific antibodies were capable of binding to the surface of M5 GAS whereas control IgG did not. Using chimeric peptides, which contain overlapping segments of p145, each 12 amino acids in length, inserted into a known helical peptide derived from the DNA binding protein of yeast, GCN4, we have been able to further define two minimal regions within p145, referred to as pJ2 and pJ7. These peptides, pJ2 and pJ7, were able to inhibit opsonization by p145 specific antibodies. Finally, we have observed an association between the age-related development of immunity to GAS and the acquisition of antibodies to the conserved epitope, p145, raising the possibility of using this epitope as a target in a propylactic **vaccine** administered during early childhood.

IT **152044-86-5**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(opsonic human antibodies from an endemic population specific for a conserved epitope on the M protein of **group A streptococci**)
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 11 Apr 1996
ACCESSION NUMBER: 1996:207219 CAPLUS
DOCUMENT NUMBER: 124:308992
TITLE: Mapping a conserved conformational epitope from the M protein of **group A streptococci**
AUTHOR(S): Relf, W. A.; Cooper, J.; Brandt, E. R.; Hayman, W. A.; Anders, R. F.; Pruksakorn, S.; Currie, B.; Saul, A.; Good, M. F.
CORPORATE SOURCE: Queensland Inst. Med. Res., Menzies Sch. Health Res., Casuarina, Australia
SOURCE: Peptide Research (1996), 9(1), 12-20
CODEN: PEREEO; ISSN: 1040-5704
PUBLISHER: Eaton
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The carboxyl terminus of the M protein of **group A streptococci** (**GAS**) is highly conserved and contains epitopes that have been shown to induce opsonic antibodies and protection against **GAS** infection. This region of the protein can also stimulate T cells, which can react in vitro with heart antigens. Since different segments of the carboxyl terminus may be involved in immunity to GAS and in the pathogenesis of autoimmune disease (rheumatic heart disease), it is important to precisely define critical epitopes. However, the M protein is known to be a coiled coil, and a critical immunodominant antibody-binding epitope within this region (peptide 145, a 20-mer with the sequence LRRDLDASREAKKQVEKALE) is shown here to be conformational. Thus, small synthetic overlapping peptides of 8-12 amino acids in length that span peptide 145 (p145) were unable to capture antibodies present in p145-immune mouse sera or in endemic human sera, even though antibodies raised to these small peptides coupled to diphtheria toxoid could bind the smaller peptides and, in some cases, p145. A series of mutated peptides in which every residue of p145 was sequentially altered also failed to identify critical residues for antibody binding. We thus devised a strategy to produce chimeric peptides in which small peptides copying the M protein sequence were displayed within a larger 28-mer peptide derived from the sequence of the GCN4 leucine zipper DNA binding protein of yeast. A 12-amino-acid window of the p145 sequence was inserted into the GCN4 peptide in such a way as to preserve any potential helical structure. The window was moved along one residue at a time to give a series of peptides representing p145. CD demonstrated that these larger chimeric peptides and p145, but not a shorter 12-mer peptide, displayed α-helical potential in 50% trifluoroethanol. Certain chimeric peptides efficiently captured antibodies specific for p145 and thus enabled us to map the minimal antibody-binding sequence, RRDLDASREAKK, referred to as J12. The chimeric peptide containing this sequence, referred to as J2, was able to inhibit opsonization of GAS by human antisera containing anti-peptide 145 antibodies. The T-cell response from p145-**immunized** responder B10.BR mice to J2 and

J12 was much lower than the response to p145 and mapped to a different peptide.

IT **152044-86-5**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; mapping a conserved conformational epitope from the M protein of **group A streptococci**)

L9 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 11 Nov 1994
ACCESSION NUMBER: 1995:178734 CAPLUS
DOCUMENT NUMBER: 122:29518
TITLE: Identification of T cell autoepitopes that cross-react with the C-terminal segment of the M protein of **group A streptococci**
AUTHOR(S): Pruksakorn, Sumalee; Currie, Bart; Brandt, Evelyn; Phornphutkul, Charlie; Hunsakunachai, Somchai; Manmontri, Anon; Robinson, John H.; Kehoe, Michael A.; Galbraith, Andrew; et al.
CORPORATE SOURCE: Cooperative Research Centre Vaccine Technology, Queensland Institute Medical Research, Brisbane, 4029, Australia
SOURCE: International Immunology (1994), 6(8), 1235-44
CODEN: INIMEN; ISSN: 0953-8178
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rheumatic fever (RF) follows a throat infection with different M-serotypes of β-hemolytic **group A streptococci** (**GAS**) and can affect different tissues, predominantly the heart. It is thought to be an autoimmune illness. Although histol. examination of affected heart shows an infiltrate consisting mainly of T cells, antigens or epitopes that could be putative targets of autoimmune T cells have not been identified. The authors have examined the T cell response to the conserved C-terminal region of the M protein (a streptococcal surface coiled-coil protein which is the target of opsonic antibodies and antibodies which cross-react with human heart tissue). Australian Aborigine, Caucasian and Thai patients, controls and mice were studied to define regions of the protein immunogenic for T cells, and T cell lines and clones were tested for cross-reactivity to myosin as well as an extract of RF-diseased mitral heart valve. Murine (B10, B10.D2, B10.BR) M peptide-specific T cells were often cross-reactive for other M peptides but did not cross-react with human heart antigens. Patients with RF or other heart diseases, or control subjects exposed more commonly to GAS were more likely to have T cell responses to the M protein, with many regions of the C-terminus being recognized. T cell lines and a clone specific for different M peptides were generated from five donors. Cross-reactivity could be shown between different M peptides, but unlike murine M peptide-specific T cells three of the human T cell lines reacted strongly to peptides representing homologous regions of cardiac and skeletal muscle myosins, and two of these lines also responded to porcine myosin and an extract of human rheumatic mitral valve. However, these last two lines were derived from a normal donor without history of RF or other heart disease. The data demonstrate that regions of the M protein, including regions that are being considered as subunit **vaccines**, have the potential to stimulate pre-existing heart cross-reactive T cells, but that the

ability of such T cells to cross-react (as measured in vitro) is not in itself sufficient to lead to disease.

IT **152044-86-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(M5 protein-derived; human T-cell cross-reactivity with myosin and **group A streptococcal** matrix protein)

L9 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 06 Aug 1994
ACCESSION NUMBER: 1994:465547 CAPLUS
DOCUMENT NUMBER: 121:65547
TITLE: Antigen of hybrid m protein and carrier for **group a streptococcal vaccine**
INVENTOR(S): Dale, James B.
PATENT ASSIGNEE(S): University of Tennessee Research Corp., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9406465	A1	19940331	WO 1993-US8704	19930915
W: AU, CA, CZ, FI, HU, JP, KR, NO, NZ, PL, RU, SK				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9351285	A1	19940412	AU 1993-51285	19930915
EP 618813	A1	19941012	EP 1993-922202	19930915
EP 618813	B1	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 211654	E	20020115	AT 1993-922202	19930915
CA 2123580	C	20050426	CA 1993-2123580	19930915
US 6419932	B1	20020716	US 1997-914479	19970819
US 2002176863	A1	20021128	US 2002-141627	20020507
PRIORITY APPLN. INFO.:			US 1992-945860 A	19920916
			WO 1993-US8704 W	19930915
			US 1995-409270 B1	19950323
			US 1997-914479 A1	19970819

AB **Streptococcal** M protein peptides that elicit protective antibodies against **Group A streptococci** and prevent rheumatic fever are manufactured as fusion proteins of N- and C-terminal peptides of the protein by expression of the gene in a microbial host. The peptides used may be shorter than those normally required for **vaccines**. Peptides from other proteins may be used as the carrier with the domains linked by a hydrophobic peptide. The protein may be administered by conventional methods, or by use of a non-pathogenic Streptococcus, e.g. a non-cariogenic S. mutans, expressing the gene. Fusion products of the M24 protein and the B subunit of Escherichia coli heat-labile enterotoxin were manufactured by expression of the gene in Escherichia coli. The proteins were purified, emulsified with complete Freund's adjuvant and 300 μg of

protein injected s.c. into rabbits with a booster given four weeks later. Specific opsonic antibodies against type 24 Streptococcus were obtained; these antibodies were not effective against type 5 Streptococcus. In passive mouse protection tests, the i.p. LD50 for type 24 Streptococcus was 1.5+105 CFU for control animals and 2.5+106 for animals pretreated with rabbit antiserum.

IT **156512-62-8 156512-64-0**
RL: BIOL (Biological study)
(amino acid sequence of and cloning and expression of gene for, Streptococcus **vaccines** in relation to)

L9 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 23 Jul 1994
ACCESSION NUMBER: 1994:433144 CAPLUS
DOCUMENT NUMBER: 121:33144
TITLE: A derivative of the M protein of **group A Streptococcus** carrying antigens for several different serotypes for **vaccines**
INVENTOR(S): Dale, James B.; Lederer, James W., Jr.
PATENT ASSIGNEE(S): University of Tennessee Research Corp., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9406421	A1	19940331	WO 1993-US8703		19930915
W: AU, CA, CZ, FI, HU, JP, KR, NO, NZ, PL, RU, SK					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
AU 9351284	A1	19940412	AU 1993-51284		19930915
EP 625043	A1	19941123	EP 1993-922201		19930915
EP 625043	B1	20020320			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
AT 214601	E	20020415	AT 1993-922201		19930915
ES 2170075	T3	20020801	ES 1993-922201		19930915
CA 2123579	C	20050510	CA 1993-2123579		19930915
PRIORITY APPLN. INFO.:			US 1992-945954	A	19920916
			WO 1993-US8703	W	19930915

AB A gene encoding a protein carrying epitopes of the M protein of several different serotypes of **group A Streptococci** is used to manufacture the proteins for **vaccines** for the prevention of rheumatic fever. The genes are constructed by standard methods with epitopes from different serotypes selected with the aim of maximizing antigenicity and distinguishing them clearly from other epitopes. Epitopes from the C repeat of M5, M6, M19 and M24 forms of the proteins were incorporated into the final protein. The protein was manufactured in Escherichia coli using the com. expression vector pKK223-3. Rabbits **immunized** with the protein produced opsonizing antibodies to the protein. Variations in the peptide linkers used and the arrangements of epitopes in the protein were also tested.

IT **156067-07-1**

RL: BIOL (Biological study)
(amino acid sequence and cloning of gene for, Streptococcus **vaccines** in relation to)

L9 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ED Entered STN: 22 Jan 1994
ACCESSION NUMBER: 1994:38113 CAPLUS
DOCUMENT NUMBER: 120:38113
TITLE: Synthetic peptides useful in a **vaccine** against and in the diagnosis of streptococcal infection
INVENTOR(S): Good, Michael Francis; Pruksakorn, Sumalee
PATENT ASSIGNEE(S): Council of the Queensland Institute of Medical Research, Australia
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9321220	A1	19931028	WO 1993-AU131		19930330
W: AU, BR, CA, KR, NZ, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
AU 9337417	A1	19931118	AU 1993-37417		19930330
PRIORITY APPLN. INFO.:			AU 1992-1800	A	19920408
			WO 1993-AU131	A	19930330

AB A synthetic peptide is given, which comprises B-cell epitopes from M protein carboxy-terminus of **group A** β-hemolytic **streptococci**. The peptide is only minimally reactive with the human heart tissue. The peptide is LRRDLDASREAKKQVEKALE. The peptide may be used to manufacture a **vaccine** against streptococcal infection and for the diagnosis of streptococcal infection.

IT **152044-86-5**
RL: PRP (Properties)
(peptide sequence of, B-cell epitope from M protein carboxy-terminus of **group A** β-hemolytic **streptococci**)

E20 THROUGH E52 ASSIGNED

FILE 'REGISTRY' ENTERED AT 10:28:01 ON 16 JUN 2005
L10 33 SEA FILE=REGISTRY ABB=ON PLU=ON (152044-86-5/BI OR 273206-02-3/BI OR 156067-07-1/BI OR 448895-56-5/BI OR 448895-57-6/BI OR 448895-58-7/BI OR 156512-62-8/BI OR 156512-64-0/BI OR 200557-59-1/BI OR 267640-94-8/BI OR 384392-93-2/BI OR 448895-51-0/BI OR 448895-52-1/BI OR 448895-55-4/BI OR 448895-59-8/BI OR 473836-05-4/BI OR 661475-93-0/BI OR 661475-94-1/BI OR 663226-65-1/BI OR 663226-66-2/BI OR 663226-67-3/BI OR 663226-68-4/BI OR 756906-73-7/BI OR 775348-82-8/BI OR 812029-82-6/BI OR 843609-86-9/BI OR 843609-87-0/BI OR 843609-88-1/BI OR 843609-89-2/BI OR 843609-90-5/BI OR 843609-91-6/BI OR 843609-92-7/BI OR 849718-05-4/BI)

L10 ANSWER 1 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **849718-05-4** REGISTRY
CN 122: PN: WO2005032582 SEQID: 123 unclaimed protein (9CI) (CA INDEX NAME)
SQL 483
MF Unspecified
CI MAN

REFERENCE 1: 142:390944

L10 ANSWER 2 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-92-7** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminoeicosanoylglycyl-2-aminoeicosanoyl-2-aminoeicosanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 3 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-91-6** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminotetradecanoylglycyl-2-aminotetradecanoyl-2-aminotetradecanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 4 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-90-5** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminododecanoylglycyl-2-aminododecanoyl-2-aminododecanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 5 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-89-2** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-

L-lysyl]-L-lysyl-2-aminodecanoylglycyl-2-aminodecanoyl-2-aminodecanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 6 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-88-1** REGISTRY
CN Dodecanamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminododecanoyl-2-aminododecanoyl-2-amino- (9CI) (CA INDEX NAME)
SQL 86,25,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 7 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-87-0** REGISTRY
CN Dodecanamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminododecanoyl-2-amino- (9CI) (CA INDEX NAME)
SQL 85,24,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 8 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **843609-86-9** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl]-L-lysyl-2-aminododecanoyl-2-aminododecanoyl- (9CI) (CA INDEX NAME)
SQL 170,26,22,21,21,20,20,20,20
MF Unspecified
CI MAN

REFERENCE 1: 142:216860

L10 ANSWER 9 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **812029-82-6** REGISTRY
CN 672: PN: WO02083859 SEQID: 672 unclaimed protein (9CI) (CA INDEX NAME)
SQL 553
MF Unspecified
CI MAN

REFERENCE 1: 142:73410

L10 ANSWER 10 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **775348-82-8** REGISTRY
CN L-Cysteine, L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl- (9CI) (CA INDEX NAME)
SQL 21
MF C102 H180 N34 O34 S

REFERENCE 1: 141:348335

L10 ANSWER 11 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **756906-73-7** REGISTRY
CN Antigen (Streptococcus pyogenes gene SPY2018) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 47: PN: WO2004078907 SEQID: 237 claimed sequence
SQL 581
MF Unspecified
CI MAN

REFERENCE 1: 141:276270

L10 ANSWER 12 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **663226-68-4** REGISTRY
CN L-Lysine, glycyl-L-alanyl-L-leucyl-L-asparaginyl-L-asparaginyl-L-arginyl-L-phenylalanyl-L-glutaminyl-L-isoleucyl-L-lysylglycyl-L-valyl-L-α-glutamyl-L-leucyl-L-lysyl-L-seryl-L-lysyl-L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 108: PN: WO2004014956 SEQID: 108 claimed protein
SQL 46
MF Unspecified
CI MAN

REFERENCE 1: 140:198068

L10 ANSWER 13 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **663226-67-3** REGISTRY
CN L-Lysine, glycyl-L-alanyl-L-leucyl-L-asparaginyl-L-asparaginyl-L-arginyl-L-phenylalanyl-L-glutaminyl-L-isoleucyl-L-lysylglycyl-L-valyl-L-α-glutamyl-L-leucyl-L-lysyl-L-seryl-L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 107: PN: WO2004014956 SEQID: 107 claimed protein
SQL 45
MF Unspecified
CI MAN

REFERENCE 1: 140:198068

L10 ANSWER 14 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN

RN **663226-66-2** REGISTRY
CN L-Lysine, L-lysyl-L-leucyl-L-isoleucyl-L-prolyl-L-asparaginyl-L-alanyl-L-seryl-L-leucyl-L-isoleucyl-L-α-glutamyl-L-asparaginyl-L-cysteinyl-L-threonyl-L-lysyl-L-alanyl-L-α-glutamyl-L-leucyl-L-lysyl-L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 106: PN: WO2004014956 SEQID: 106 claimed protein
SQL 47
MF Unspecified
CI MAN

REFERENCE 1: 140:198068

L10 ANSWER 15 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **663226-65-1** REGISTRY
CN L-Lysine, L-lysyl-L-leucyl-L-isoleucyl-L-prolyl-L-asparaginyl-L-alanyl-L-seryl-L-leucyl-L-isoleucyl-L-α-glutamyl-L-asparaginyl-L-cysteinyl-L-threonyl-L-lysyl-L-alanyl-L-α-glutamyl-L-leucyl-L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 105: PN: WO2004014956 SEQID: 105 claimed protein
SQL 46
MF Unspecified
CI MAN

REFERENCE 1: 140:198068

L10 ANSWER 16 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **661475-94-1** REGISTRY
CN L-Lysine, S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinyl-L-seryl-L-seryl-L-lysyl-L-leucyl-L-isoleucyl-L-prolyl-L-asparaginyl-L-alanyl-L-seryl-L-leucyl-L-isoleucyl-L-α-glutamyl-L-asparaginyl-L-cysteinyl-L-threonyl-L-lysyl-L-alanyl-L-α-glutamyl-L-leucyl-N6-[S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinyl-L-seryl-L-seryl]-L-lysyl-L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
SQL 53,50,3
MF Unspecified
CI MAN

REFERENCE 1: 140:198068

L10 ANSWER 17 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **661475-93-0** REGISTRY
CN L-Lysine, L-lysyl-L-leucyl-L-isoleucyl-L-prolyl-L-asparaginyl-L-alanyl-L-seryl-L-leucyl-L-isoleucyl-L-α-glutamyl-L-asparaginyl-L-

cysteinyl-L-threonyl-L-lysyl-L-alanyl-L-α-glutamyl-L-leucyl-N6-[S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinyl-L-seryl-L-seryl]-L-lysyl-L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
SQL 50,47,3
MF Unspecified
CI MAN

REFERENCE 1: 140:198068

L10 ANSWER 18 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **473836-05-4** REGISTRY
CN L-Cysteine, L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-glutaminyl- (9CI) (CA INDEX NAME)
SQL 30
MF C146 H254 N44 O50 S

REFERENCE 1: 137:323858

L10 ANSWER 19 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-59-8** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminoeicosanoylglycyl-2-aminoeicosanoyl-2-aminoeicosanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 137:167876

L10 ANSWER 20 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-58-7** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminotetradecanoylglycyl-2-aminotetradecanoyl-2-aminotetradecanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 141:37331

REFERENCE 2: 137:167876

L10 ANSWER 21 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-57-6** REGISTRY

CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminododecanoylglycyl-2-aminododecanoyl-2-aminododecanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 141:37331

REFERENCE 2: 137:167876

L10 ANSWER 22 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-56-5** REGISTRY
CN Glycinamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminodecanoylglycyl-2-aminodecanoyl-2-aminodecanoyl- (9CI) (CA INDEX NAME)
SQL 88,27,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 141:37331

REFERENCE 2: 137:167876

L10 ANSWER 23 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-55-4** REGISTRY
CN Dodecanamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminododecanoyl-2-aminododecanoyl-2-amino- (9CI) (CA INDEX NAME)
SQL 86,25,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 137:167876

L10 ANSWER 24 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-52-1** REGISTRY
CN Dodecanamide, N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl-2-aminododecanoyl-2-amino- (9CI) (CA INDEX NAME)
SQL 85,24,21,20,20
MF Unspecified
CI MAN

REFERENCE 1: 137:167876

L10 ANSWER 25 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **448895-51-0** REGISTRY

CN Dodecanamide, N2,N6-bis[N2,N6-bis[N2,N6-bis(L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl)-L-lysyl]-L-lysyl]-L-lysyl-2-aminododecanoyl-2-aminododecanoyl-2-amino- (9CI) (CA INDEX NAME)
SQL 170,26,22,21,21,20,20,20,20
MF Unspecified
CI MAN

REFERENCE 1: 137:167876

L10 ANSWER 26 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **384392-93-2** REGISTRY
CN Protein, M, precursor (Streptococcus pyogenes strain 4529 gene emm) (9CI) (CA INDEX NAME)
SQL 471
MF Unspecified
CI MAN

REFERENCE 1: 136:66841

L10 ANSWER 27 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **273206-02-3** REGISTRY
CN L-Lysine, L-lysyl-L-glutaminyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 101: PN: WO2004014956 SEQID: 101 claimed sequence
CN 15: PN: US20050002956 SEQID: 15 unclaimed sequence
SQL 29
MF C144 H253 N43 O48

REFERENCE 1: 142:112432

REFERENCE 2: 140:198068

REFERENCE 3: 133:16085

L10 ANSWER 28 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **267640-94-8** REGISTRY
CN 5: PN: US6063386 SEQID: 11 unclaimed protein (9CI) (CA INDEX NAME)
SQL 236
MF Unspecified
CI MAN

REFERENCE 1: 132:333387

L10 ANSWER 29 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **200557-59-1** REGISTRY
CN L-Lysine, L-glutaminyl-L-lysyl-L-alanyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl-L-lysyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-α-aspartyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)

SQL 29
MF C144 H253 N43 O48

REFERENCE 1: 128:74035

L10 ANSWER 30 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **156512-64-0** REGISTRY
CN Peptide (synthetic 48-amino acid fragment) fusion protein with 214-450-protein M 5 (Streptococcus pyogenes clone pMK207) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Antigen (Streptococcus pyogenes synthetic 284-amino acid)
SQL 284
MF Unspecified
CI MAN

REFERENCE 1: 121:65547

L10 ANSWER 31 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **156512-62-8** REGISTRY
CN Peptide (synthetic 18-amino acid fragment) fusion protein with 215-450-protein M 5 (Streptococcus pyogenes clone pMK207) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Antigen (Streptococcus pyogenes synthetic 254-amino acid)
SQL 254
MF Unspecified
CI MAN

REFERENCE 1: 121:65547

L10 ANSWER 32 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **156067-07-1** REGISTRY
CN Protein M (Streptococcus pyogenes synthetic 305-amino acid fragment) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4: PN: US6063386 SEQID: 10 unclaimed protein
CN Protein M (Streptococcus pyogenes multiple serotype M24-M5-M6-M19 C-terminal variant)
SQL 305
MF Unspecified
CI MAN

REFERENCE 1: 132:333387

REFERENCE 2: 121:33144

L10 ANSWER 33 OF 33 REGISTRY COPYRIGHT 2005 ACS on STN
RN **152044-86-5** REGISTRY
CN L-Glutamic acid, L-leucyl-L-arginyl-L-arginyl-L-α-aspartyl-L-leucyl-L-α-aspartyl-L-alanyl-L-seryl-L-arginyl-L-α-glutamyl-L-alanyl-L-lysyl-L-lysyl-L-glutaminyl-L-valyl-L-α-glutamyl-L-lysyl-L-alanyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5: PN: US20050002956 SEQID: 5 unclaimed sequence
CN Peptide 145 (Streptococcus group A M protein epitope)
SQL 20
MF C99 H175 N33 O33

REFERENCE 1: 142:216860

REFERENCE 2: 142:112432

REFERENCE 3: 141:37331

REFERENCE 4: 131:57532

REFERENCE 5: 128:87562

REFERENCE 6: 128:74035

REFERENCE 7: 128:21635

REFERENCE 8: 127:306348

REFERENCE 9: 127:134604

REFERENCE 10: 126:6293

FILE 'MEDLINE' ENTERED AT 10:29:20 ON 16 JUN 2005

FILE 'BIOSIS' ENTERED AT 10:29:20 ON 16 JUN 2005

FILE 'EMBASE' ENTERED AT 10:29:20 ON 16 JUN 2005

L12 2 S L1

PROCESSING COMPLETED FOR L12
L13 2 DUP REM L12 (0 DUPLICATES REMOVED)

L13 ANSWER 1 OF 2 MEDLINE on STN
ACCESSION NUMBER: 97117190 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8958259
TITLE: Detection of Fc receptor genes from Staphylococcus aureus and streptococci by polymerase chain reaction.
AUTHOR: Yamada S; Yamagishi J; Matsumoto A
CORPORATE SOURCE: Department of Microbiology, Kawasaki Medical School, Kurashiki, Okayama, Japan.
SOURCE: Journal of medical microbiology, (1996 Dec) 45 (6) 507-11.
Journal code: 0224131. ISSN: 0022-2615.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 20030403
Entered Medline: 19970107

AB A method based upon the polymerase chain reaction (PCR) for detecting genes encoding the Fc receptors of Staphylococcus aureus and streptococci is described. Primers were designed from the nucleotide sequences of the five Fc receptor genes encoding protein A, protein G, protein H, FcRA and protein V. Amplification products corresponding in size to the protein A and protein G genes were detected in S. aureus strain Cowan 1 and Streptococcus pyogenes strain G148,

respectively, as expected. Str. pyogenes strain AR1 was shown to possess the type H receptor gene. Two clinical isolates of Str. pyogenes, strains IP-28 and ES-21L, were shown to possess genes for Fc receptor types FcRA and protein G, respectively. The identification of all these products was confirmed by restriction endonuclease analysis. Amplification of protein H genes from two other clinical isolates of streptococci, MS-4 and MS-38, yielded a product larger than expected and with a different restriction fragment pattern to strain AR1, indicating a new type of Fc receptor gene. This PCR method provides a DNA-based method for the determination of Fc receptor type in S. aureus and streptococci.

L13 ANSWER 2 OF 2 MEDLINE on STN
ACCESSION NUMBER: 93013016 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1398120
TITLE: Protein V, a novel type-II IgG receptor from Streptococcus sp.: sequence, homologies and putative Fc-binding site.
COMMENT: Erratum in: Gene. 1993 Feb 14;124(1):149-50. PubMed ID: 8095040
AUTHOR: Smirnov OYu; Denesyuk A I; Zakharov M V; Abramov V M; Zav'yalov V P
CORPORATE SOURCE: Institute of Immunology, State Concern Biopreparation, Moscow Region, Russia.
SOURCE: Gene, (1992 Oct 12) 120 (1) 27-32.
Journal code: 7706761. ISSN: 0378-1119.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-X62467
ENTRY MONTH: 199211
ENTRY DATE: Entered STN: 19930122
Last Updated on STN: 20030403
Entered Medline: 19921104

AB We have cloned and sequenced the Fc-receptor-encoding gene, fcrV, from a group G streptococcus. Considerable similarity was revealed between the FcRV, FcRA76 and M proteins of group A streptococci in their signal sequences and 3' termini, and between the Fc-binding regions of FcRV and FcRA76. The promoter and terminator regions showed no homology with those of the fcrA76 and M protein-encoding genes. The A1-A4 domains of FcrV (protein V) exhibit a heptapeptide repeat motif which is characteristic of alpha-helical coiled-coil proteins. The sequence, Ser-Asn-Arg-Ala-Ala, in the outer position, 'f' of each domain is highly conserved and may be involved in FcR-IgG interactions.

FILE 'HOME' ENTERED AT 10:29:28 ON 16 JUN 2005

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=> d his ful

     (FILE 'HOME' ENTERED AT 10:16:43 ON 16 JUN 2005)
               DEL HIS Y

     FILE 'REGISTRY' ENTERED AT 10:19:45 ON 16 JUN 2005

     FILE 'REGISTRY' ENTERED AT 10:20:11 ON 16 JUN 2005
L1           131 SEA ABB=ON  PLU=ON  ASREAKKQVEKALE|KQAEDKVKASREAKKQVEKALEQL
                 EDKVK/SQSP

     FILE 'CAPLUS' ENTERED AT 10:20:19 ON 16 JUN 2005
L2            68 SEA ABB=ON  PLU=ON  L1
L*** DEL       1 S LOWELL ?/AU AND L2
                 D TI AU
L3            30 SEA ABB=ON  PLU=ON  L2 AND (VACCIN? OR IMMUNIS? OR
                 IMMUNIZ?)
L4            28 SEA ABB=ON  PLU=ON  L3 AND (GAS(S)STREPTOCOCC? OR STREPTOCO
                 CC?)
L*** DEL       1 S L4 AND LOWELL ?/AU
                 D .BEVSTR
L5            49 SEA ABB=ON  PLU=ON  L2 AND (GAS(S)STREPTOCOCC? OR STREPTOCO
                 CC?(S)(GROUP A))
L6            18 SEA ABB=ON  PLU=ON  L5 AND ANTIGEN?
L*** DEL      34 S L4 OR L6
L*** DEL      12 S L6 AND (VACCIN? OR IMMUNIS? OR IMMUNIZ?)
L7            24 SEA ABB=ON  PLU=ON  L5 AND (VACCIN? OR IMMUNIS? OR
                 IMMUNIZ?)
L8             8 SEA ABB=ON  PLU=ON  L7 AND ADJUVANT
L9            24 SEA ABB=ON  PLU=ON  L3 AND (GAS(S)STREPTOCOCC? OR STREPTOCO
                 CC?(S)(GROUP A))
                 D QUE L8
                 D QUE L9
L*** DEL      24 S L8 OR L9

     FILE 'REGISTRY' ENTERED AT 10:27:22 ON 16 JUN 2005

     FILE 'CAPLUS' ENTERED AT 10:27:22 ON 16 JUN 2005
               D QUE L9
               D L9 1-24 .BEVSTR
               SEL HIT L9 1-24 RN

     FILE 'REGISTRY' ENTERED AT 10:28:01 ON 16 JUN 2005
L10           33 SEA ABB=ON  PLU=ON  (152044-86-5/BI OR 273206-02-3/BI OR
                 156067-07-1/BI OR 448895-56-5/BI OR 448895-57-6/BI OR
                 448895-58-7/BI OR 156512-62-8/BI OR 156512-64-0/BI OR
                 200557-59-1/BI OR 267640-94-8/BI OR 384392-93-2/BI OR
                 448895-51-0/BI OR 448895-52-1/BI OR 448895-55-4/BI OR
                 448895-59-8/BI OR 473836-05-4/BI OR 661475-93-0/BI OR
                 661475-94-1/BI OR 663226-65-1/BI OR 663226-66-2/BI OR
                 663226-67-3/BI OR 663226-68-4/BI OR 756906-73-7/BI OR
                 775348-82-8/BI OR 812029-82-6/BI OR 843609-86-9/BI OR
                 843609-87-0/BI OR 843609-88-1/BI OR 843609-89-2/BI OR
                 843609-90-5/BI OR 843609-91-6/BI OR 843609-92-7/BI OR
                 849718-05-4/BI)
                 D QUE
L11            0 SEA ABB=ON  PLU=ON  1-33 .BEVREG

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:28:33 ON 16 JUN 2005
```

L12 2 SEA ABB=ON PLU=ON L1

FILE 'REGISTRY' ENTERED AT 10:29:12 ON 16 JUN 2005
D L10 1-33 .BEVREG

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:29:20 ON 16 JUN 2005
L13 2 DUP REM L12 (0 DUPLICATES REMOVED)
D 1-2 IBIB ABS

FILE 'HOME' ENTERED AT 10:29:28 ON 16 JUN 2005

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 JUN 2005 HIGHEST RN 852355-71-6
DICTIONARY FILE UPDATES: 15 JUN 2005 HIGHEST RN 852355-71-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

FILE CAPLUS

FILE COVERS 1907 - 16 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 15 Jun 2005 (20050615/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MEDLINE
FILE LAST UPDATED: 15 JUN 2005 (20050615/UP). FILE COVERS 1950 TO DA

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 10 June 2005 (20050610/ED)

FILE RELOADED: 19 October 2003.

FILE EMBASE
FILE COVERS 1974 TO 9 Jun 2005 (20050609/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE HOME